## **Claims**

1. Use of a CD44 blocking molecule in the manufacture of a medicament for prevention or reduction of ischemia-reperfusion injury.

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- 2. A use according to claim 1, wherein the ischemia-reperfusion injury is prevented or reduced in a subject undergoing solid organ transplantation.
- 3. A use according to claim 2, wherein the solid organ is selected from the group consisting of kidney, liver, lungs, heart, small intestine and pancreas.
  - 4. A use according to claims 2 or 3, wherein the medicament comprising the CD44 blocking molecule is administered prior to transplantation.
- 15 5. A use according to claim 4, wherein the medicament is administered to the subject in one or multiple intravenous injections.
  - 6. A use according to claims 4 or 5, wherein the medicament is administered to the solid organ by perfusion of the organ with a solution comprising the medicament.

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- 7. A use according to claim 1, wherein the ischemia-reperfusion injury is prevented or reduced in one or more solid organs in a subject in shock.
- 8. A use according to claim 7, wherein the solid organs include the kidney.

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- 9. A use according to claim 8, for the prevention or reduction of tubulus necrose.
- 10. A use according to claim 1, wherein the ischemia-reperfusion injury is prevented or reduced in one or more one or more organs, limbs, extremities or body parts that have been severed from the body and that are being re-attached to the body by reconstructive microsurgery.

- 11. A use according to any one of the preceding claims, wherein the CD44 blocking molecule is an anti-CD44 antibody or low-molecular weight hyaluronate.
- 12. A use according to claim 11, wherein the anti-CD44 antibody is an antibody capable of cross-blocking the IM7 antibody by at least 10%.
  - 13. A use according to claims 11 or 12, wherein the antibody is a chimeric, deimmunised, humanised or human antibody.
- 10 14. A method for prognoses of the risk of rejection of a transplanted organ, wherein the method comprises the step of measuring the level of soluble CD44.
  - 15. A method for prognoses of the risk of rejection reconstructed organ, limb, extremity or body part, wherein the method comprises the step of measuring the level of soluble CD44.
  - 16. A method according to claims 14 or 15, wherein the level of soluble CD44 is measured prior to transplantation or reconstruction of the organ, limb, extremity or body part.

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- 17. A method according to any one of claims 14-16, wherein the level of soluble CD44 is measured *ex vivo* in a biological sample.
- 18. A method according to any one of claims 14-17, wherein the biological sample is a blood, a blood fraction, serum, urine or a urine fraction.
  - 19. A method according to any one of claims 14-18, wherein the organ is selected from the group consisting of kidney, liver, lungs, heart, small intestine and pancreas.
- 30 20. A method according to any one of claims 14-18, wherein a serum CD 44 level in excess of 600 ng soluble CD44 per ml serum is indicative for a high risk of rejection of the organ, limb, extremity or body part.